

Observations of Wilmot's Comet.

Horizontal Parallax.					
April 20	3'3"	May 6	3'0"	May 22	2'8"
24	3'2"	10	3'0"	26	2'8"
28	3'1"	14	2'9"	30	2'7"
May 2	3'1"	18	2'9"		

Observations of Wilmot's Comet. By Mr. Maclear.

Mr. Maclear's absence from the Observatory, while engaged in the measurement of an arc of the meridian, has occasioned a considerable delay in reducing the observations of this comet.

The places of the comet are corrected for refraction, and the log. factor is annexed to each, which, when added to the log. hor. parallax in seconds of space, will give the log. correction in right ascension and north polar distance, in time and arc respectively.

The catalogue of the stars of comparison is appended.\*

CAPE OF GOOD HOPE.

(Mr. Maclear.)

	Cape M.T. h m s	R.A. h m s	Log. Fact.	N.P.D. ° ' "	Log. Fact.	Obs.	Star.
1844. Dec. 24	8 17 29	19 43 11'86	+8'8384	128 12 17'1	+9'7346	2	1
27	8 14 23	20 16 49'16	'8637	131 3 41'0	'6756	10	2
	8 37 35	17 0'34	'8571	131 4 27'7	'7221	10	3
28	8 19 14	28 30'05	'8707	131 50 48'8	'6413	10	4
	9 7 33	28 58'68	'8519	131 52 36'5	'7601	8	4
30	8 38 34			133 10 14'1	'6644	6	5
	8 38 57	52 54'72	'8781			7	5
	9 6 2	53 8'60	'8699			9	6
	9 6 30			133 11 0'9	'7239	8	6
	9 31 50	20 53 22'03	'8562	133 11 24'8	'7706	6	5
31	8 31 24	21 5 14'12	'8838	133 41 11'1	'6232	10	7
	9 8 33	5 33'21	'8759	133 41 54'3	'7090	10	7
1845. Jan. 1	8 42 57	17 52'05	'8867	134 6 43'3	'6279	9	8
3	9 20 28	21 43 32'37	'8876	134 40 29'4	'6733	5	9
5	9 58 45	22 9 13'66	'8819	134 50 48'0	'7178	7	10
6	8 14 9	20 52'14	'8762	134 47 45'7	'3761	10	11
	9 9 6	21 20'25	'8920	134 47 37'7	'5745	10	12
	9 34 12	21 33'45	'8909			12	11
	9 45 58			134 47 21'8	'6710	12	11
	10 3 6	21 48'59	'8832			12	11
9	9 1 59	57 46'20	'8809	134 7 3'5	'4821	12	13
	9 25 21	57 57'78	'8861			10	13
	9 40 13			134 6 29'2	+9'5977	14	13
	9 58 20	22 58 13'79	+8'8859			8	13

\* The columns R.A. Comet—R.A. Star; and N.P.D. Comet—N.P.D. Star, are omitted, though given by Mr. Maclear.

Observations of Wilmot's Comet.

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1845.	Cape M.T.			R.A.	Log. Fact.	N.P.D.	Log. Fact.	Obs.	Star.
	h	m	s	h	m	s			
Jan. 11	9	24	12	23 20 52.27	+8.8769	133 16 47.8	+9.5120	10	14
12	9	14	46	31 46.43	.8678	132 46 3.1	.4615	10	15
	9	54	17	23 32 3.50	.8771	132 45 17.5	.5860	10	16
15	9	26	43	0 2 28.99	.8522	130 54 35.8	.4619	10	18
	9	58	4	2 40.56	.8624	130 53 49.8	.5596	10	17
16	10	34	4	12 20.42	.8601	130 10 32.7	.6378	14	19
17	10	13	24	21 15.02	.8540	129 27 9.0	.5846	6	20
18	9	41	9	29 43.50	.8376	128 42 36.9	.4873	15	21
19	9	49	12	38 4.28	.8347	127 55 25.6	.5077	1	22
	10	19	42	0 38 15.38	.8442	127 54 26.0	.5898	2	22
22	9	4	24	1 0 39.50	.7824	125 31 34.0	.3660	10	23
	9	55	28	0 54.76	.8189	125 29 51.0	.5220	10	23
24	9	3	13	14 17.40	.7668			12	24
	9	21	26			123 52 10.0	.4328	16	24
	10	12	54	14 36.41	.8154			12	24
25	8	54	28	20 38.21	.7504	123 3 39.1	.3581	10	25
	9	30	23	20 47.48	.7851	123 2 23.7	.4642	10	26
27	9	49	2	32 49.33	.7878	121 23 37.6	.5227	8	27
28	9	41	9	38 24.33	.7775	120 35 31.2	.5104	12	28
29	9	41	14	43 47.05	.7726	119 47 20.1	.5174	12	29
30	9	51	33	48 59.60	.7760			12	30
31	9	38	0	53 55.49	.7620			16	31
	10	1	9			118 12 39.4	.5713	16	31
	10	25	23	54 5.35	.7897			16	31
Feb. 1	9	39	6	58 42.56	.7591			12	32
	10	0	54			117 26 35.5	.5765	10	32
	10	23	5	1 58 51.47	.7854			12	33
3	9	28	17	2 7 42.89	.7432			16	33
	9	49	55			115 57 10.7	.5697	14	33
	10	12	25	7 51.07	.7744			16	33
4	9	10	9	11 57.32	.7216			16	34
	9	32	3			115 13 58.5	.5462	16	34
	9	53	24	12 5.26	.7603			16	34
8	9	8	5			112 28 14.6	.5426	10	35
	9	34	33	27 45.67	.7366			30	35
	9	58	15			112 26 46.9	.6163	10	35
9	9	12	28	31 20.25	.7133			16	36
	9	30	19			111 48 6.8	.5819	12	36
	9	51	45	31 26.21	.7481			16	36
10	9	25	55	34 52.63	.7254			14	37
	9	44	26			111 9 6.7	.6088	14	37
	10	6	29	34 58.50	.7556			8	37
16	8	56	57	2 53 55.80	+8.6896			12	39
	9	10	60			107 35 38.9	+9.6097	10	39

*Catalogue of Mean Right Ascensions, &c.*

	Cape M.T. h m s	R.A. h m s	Log. Fact.	N.P.D. ° ' "	Log. Fact.	Obs.	Star.
1845. Feb. 16	9 24 24	2 53 59.66	+8.7188			12	39
18	8 54 11	59 40.78	.6864			12	40
	9 17 13			106 30 24.9	+9.6285	10	40
	9 37 34	2 59 45.76	.7305			12	40
27	8 19 16	3 22 32.18	.6476			20	41
	8 40 56			102 12 51.5	.6503	12	41
	9 2 56	22 36.89	.7014			20	41
28	8 30 7	24 52.27	.6647			12	42
	8 46 22			101 47 14.6	.6586	12	42
	9 2 8	24 54.93	.7016			12	42
Mar. 4	9 0 50			100 10 29.9	.6687	10	43
	9 20 50	33 47.16	.7209			18	43
5	8 48 1	35 52.63	.6933			18	44
	9 8 43			99 47 39.5	.6910	10	44
6	8 57 18	37 58.38	.7037			16	45
	9 13 12			99 25 17.0	.6965	10	45
9	8 20 25	44 2.21	.6687			24	46
	8 49 43			98 21 51.3	.6953	12	46
12	8 25 49	3 49 55.75	+8.6811			20	47
	8 46 5			97 22 16.9	+9.7038	14	47

*Catalogue of the Mean Right Ascensions and North Polar Distances of the Stars compared with Wilmot's Comet.*

Star's No.	Mag- nitude.	R.A. 1845, Jan. 1.	Annual Precess.	No. of Obs.	N.P.D. 1845, Jan. 1.	Annual Precess.	No. of Obs.
		h m s	s		° ' "	"	
1		19 42 26.93	4.014	9	128 3 11.8	8.67	3
2	8	20 16 24.71	4.030	7	130 54 46.4	11.24	5
3	9	17 15.28	4.035	4	131 8 20.3	11.30	4
4 Lacaille 8497	7	27 22.86	4.026	11	131 45 30.7	12.03	6
6		51 43.50	3.973	8	132 40 48.2	13.66	4
5 Lacaille 8638	8	20 52 0.57	4.002	7	133 35 43.9	13.68	9
7	9	21 5 55.50	3.947	9	133 35 42.7	14.54	6
8 Lacaille 8822	7.8	19 49.58	3.906	15	134 10 41.8	15.35	10
9	9	21 44 27.08	3.804	8	134 31 37.3	16.65	5
10	8	22 7 5.47	3.692	10	134 30 20.8	17.67	8
12 δ Gruis		20 28.28	3.624	15	134 32 21.6	18.19	5
11 B.A.C. 7834	7	21 25.28	3.626	6	134 53 9.6	18.23	6
13 θ Gruis		22 58 7.42	3.419	14	134 21 20.5	19.33	12
14 B.A.C. 8186	8	23 22 10.92	3.274	20	132 50 20.8	19.78	15
16	8	33 12.44	3.213	13	132 26 21.0	19.92	11

Star's No.		Mag- nitude.	R.A. 1845, Jan. 1.			Annual Precess.	No. of Obs.	N.P.D. 1845, Jan. 1.			Annual Precess.	No. of Obs.
			h	m	s			°	'	"		
15	B.A.C. 8242	7.8	23	33	41.93	3.214	6	133	7	34.5	19.92	4
17	Lacaille 9739	8	0	1	5.62	3.065	9	130	35	58.4	20.05	8
18	Lacaille 9757	8		3	26.93	3.053	6	131	14	6.9	20.05	9
19	Lacaille 50	7.8	13	10	7.0	3.006	9	130	5	57.2	20.02	6
20	Lacaille 126	8.9	26	2	4.6	2.945	7	129	32	24.9	19.93	5
21	B.A.C. 144	8	27	5	2.0	2.944	5	128	51	4.8	19.91	8
22	Lacaille 216	8	40	6	8.0	2.890	7	127	46	21.4	19.75	13
23	Lacaille 304	7.8	0	59	0.63	2.827	10	125	37	42.6	19.39	10
24		8	1	14	28.18	2.782	14	124	2	48.8	19.01	7
25		7	19	49	6.4	2.770	13	123	20	55.0	18.85	9
26		8.9	21	45	0.6	2.769	5	122	50	33.5	18.79	7
28		9	36	43	6.0	2.747	7	120	35	45.3	18.29	3
27		9	36	53	3.2	2.734	6	121	30	32.8	18.29	8
29	Lacaille 535	8	42	53	1.8	2.738	13	119	48	42.7	18.07	6
30		9.10	48	28	3.9	2.740	6	118	28	28.1	17.85	6
31		9	52	43	8.1	2.732	6	118	13	34.8	17.68	5
32		8.9	1	55	31.57	2.734	7	117	29	29.4	17.56	6
33		10	2	6	29.92	2.728	7	116	3	43.3	17.08	3
34		9	12	57	2.6	2.726	4	115	11	41.4	16.77	5
35	Lacaille 787	7.8	27	31	7.4	2.736	11	112	36	34.1	16.04	8
36		8.9	31	30	4.5	2.744	9	111	42	42.1	15.83	10
37		8.9	35	31	7.5	2.745	4	111	12	3.4	15.61	5
39	Lalande 5621	8	2	54	9.97	2.774	6	107	51	1.0	14.54	4
40		9	3	2	6.59	2.786	6	106	36	32.0	14.05	3
41	Lalande 6492	7.8	22	50	2.4	2.847	13	102	10	42.9	12.70	10
42	Weisse iii, 476	8	25	51	4.5	2.854	7	101	42	9.1	12.49	5
44	Weisse iii, 650	8	33	53	6.6	2.887	12	99	41	43.9	11.94	5
43	δ Eridani	3.4	35	49	5.8	2.874	9	100	17	31.5	11.80	3
45	Weisse iii, 746	7	38	28	5.7	2.888	12	99	29	49.3	11.61	2
46	Lalande 7246	7	47	10	7.4	2.906	10	98	22	1.6	10.98	6
47	Lalande 7370	7	3	50	37.19	2.904	7	97	23	33.2	10.73	4

On the Form of the Planet Saturn. By the Rev. R. Main.

Sir W. Herschel, from repeated estimations with various telescopes made with the greatest care (and assuredly with the most practised eye and unbiassed judgment ever brought to such a task), convinced himself that the figure of *Saturn* was not elliptical, but “like a parallelogram with the corners rounded off.” He was also